

CLAIMS

1. An optical disc recording medium, comprising:
a first substrate having a physically pre-formatted
5 surface;

a reflective film formed on said pre-formatted surface
of said first substrate;

a transparent layer with a thickness of 50-430 μm formed
on said reflective film;

10 a second substrate composed of transparent material and
located at a distance of certain spacing from said transparent
layer; and

a recording layer for hologram recording filled between
said transparent layer and said second substrate.

15 2. An optical disc recording medium, comprising:
a transparent film with a thickness of 50-430 μm having
a physically pre-formatted surface;

a reflective film formed on said pre-formatted surface
of said transparent film;

20 a first substrate arranged to support said transparent
film interposing said reflective film therebetween;

a second substrate composed of transparent material and
located at a distance of certain spacing from said transparent
film; and

25 a recording layer for hologram recording filled between
said transparent layer and said second substrate.

3. The optical disc recording medium according to
claim 1 or 2, wherein said transparent layer has a thickness
of about 200 μm .

30 4. The optical disc recording medium according to any
one of claims 1-3, wherein said first and second substrates
have thicknesses of 0.5 mm or more.

5. A method of manufacturing an optical disc recording medium, comprising the steps of:

forming embossed pits on a surface of a first substrate;

forming a reflective film on said embossed-pits-formed
5 surface of said first substrate;

forming a transparent layer with a thickness of 50-430 μm on said reflective-film-formed surface of said first substrate;

10 locating a transparent second substrate at a distance of certain spacing from said first substrate so as to interpose said transparent layer therebetween; and

filling a recording material for hologram recording between said first substrate and said second substrate to form a recording layer.

15 6. The method of manufacturing an optical disc recording medium according to claim 5, wherein the step of forming a transparent layer comprises the step of adhering a transparent film on said reflective-film-formed surface of said first substrate.

20 7. A method of manufacturing an optical disc recording medium, comprising the steps of:

forming embossed pits on a surface of a transparent film with a thickness of 50-430 μm ;

forming a reflective film on said embossed-pits-formed
25 surface of said transparent film;

adhering said transparent film on said first substrate interposing said reflective film therebetween;

30 locating a transparent second substrate at a distance of certain spacing from said first substrate so as to interpose said transparent film therebetween; and

filling a recording material for hologram recording between said first substrate and said second substrate to form

a recording layer.

8. The method of manufacturing an optical disc recording medium according to claim 5 or 7, wherein the step of filling a recording material comprises the step of filling
5 a recording material by reducing pressure in said spacing between said first and second substrates.

9. A method of manufacturing an optical disc recording medium, comprising the steps of:

forming embossed pits on a surface of a first substrate;

10 forming a reflective film on said embossed-pits-formed surface of said first substrate;

fixing a transparent plate with a thickness of 50-430 μm on the upper surface of a holder, applying a liquid recording material on said transparent plate, and pressing a transparent
15 second substrate against said recording material to form a recording layer composed of said recording material between said transparent plate and said second substrate, thus forming a triple-layered structure; and

bonding said reflective-film-formed first substrate and
20 said triple-layered structure together, locating said reflective film faced to said transparent plate.

10. The method of manufacturing an optical disc recording medium according to claim 5, 7 or 9, further comprising the step of forming a protective film on said reflective film
25 formed in the step of forming a reflective film.